



## ***Offshore Racing Rule (ORR) VPP Changes for 2022***

The ORR VPP underwent rapid development upon inception in 2005, achieved an unsurpassed ability to handicap diverse sailboats, and has been relatively stable for the last few years. As the sport of sailing progresses so too must the formulas that predict boat speed. The Offshore Racing Association (ORA) is pleased to present a major update to the model of spinnaker aerodynamics. The design and construction of asymmetric sails in particular has resulted in shapes that are more powerful, more efficient and more stable. These sails are, simply, faster.

In collaboration with ORA's Technical Advisory Committee, the VPP team has reviewed recorded boat polars as well as fundamental research into sail performance. The 2022 ORR VPP reflects that with offwind boat speeds that more closely represent what we observe on the water.

So what is the result?

1. All boats are sped up offwind to some extent. Time on distance ratings (sec/mile) that include offwind sailing will be faster.
2. Those boats that sail offwind at narrow apparent wind angles, the very fast apparent wind speedsters, are sped up the most.
3. Heavy boats that generally sail at deeper angles are sped up less.
4. This is due to the fact that the improvements in spinnaker performance are greater at the smaller apparent wind angles. At very large angles the air flow is more separated, even stalled, and there is less gain to be made with better shapes.
5. The time on time ratings for your boat may be larger (faster) or smaller (slower) because these ratings are simply speed ratios that compare your boat to the Farr 40 one design configured with a masthead spinnaker. That Farr 40 is the scratch boat for time on time ratings. (The only exception is the Transpac Race ratings that use a different boat.)
6. For Performance Curve Scoring (PCS), used by the Newport to Bermuda Race, the ratings are all time on distance (second per mile.) These ratings will all be smaller (faster.) But in handicap racing everything is relative. Some boats will have sped up more than yours, some less. Points 2) and 3) above should be kept in mind in seeing how your boat fares against the competition.
7. See page 2 of this document to view the 2022 and 2021 polar chart for the Farr 40 MH 1D.
8. If one of your time on time ratings is slower in 2022 it is because, even though you are faster, the Farr 40 scratch boat sped up even more.
9. If your rating is faster it is because you sped up more than the Farr 40.
10. All valid certificates will be available to view and print at the following site:  
[https://www.regattaman.com/certificate\\_page.php](https://www.regattaman.com/certificate_page.php)

As boat and sail design progresses, so too will the ORR VPP. We will continue to monitor racing and race results to guide us in identifying areas of improvement.

Have a great season.

ORA Technical Team

# Farr 40 MH One Design Polars: 2021 vs 2022

Blue Curves are 2021, Red are 2022



## POLAR COMPARE FARR40MH1D

